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### REMARKS

Claims 1, 6-13, 15, 16, and 20-40 are pending. Claim 5 has been canceled without prejudice. Claims 1, 6, 13, 15, 16, and 20-27 have been amended for clarification only and as suggested by Examiner Lawrence Williams in his email dated October 22, 2006. The amendment to the claims is supported by page 10, line 19, through page 12, line 25, of the specification as filed. Claims 28-40 are new and are supported by Figure 5, page 4, lines 2-5, page 9, line 13, through page 10, line 18, and page 12, line 23, through page 13, line 10, of the specification as filed. It is respectfully submitted that no new matter has been added.

The Patent Office rejected claims 1, 5, 11-13, 15, 16, 21, and 27 under 35 U.S.C. 103(a) as being unpatentable over Luz, U.S. Patent No. 6,088,399, in view of Damgaard, U.S. Patent No. 6,766,178.

The Patent Office rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over Luz, U.S. Patent No. 6,088,399, in view of Damgaard, U.S. Patent No. 6,766,178, and further in view of Yokev, U.S. Patent No. 5,499,266.

The Patent Office rejected claims 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Damgaard, as applied to claim 1, in view of Bell, U.S. Patent No. 6,088,348.

The Patent Office rejected claims 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Damgaard, as applied to claim 8, and further in view of Applicant's Background of the Invention (BOI).

The Patent Office rejected claim 20 under 35 U.S.C. 103(a) as being unpatentable over Bell, in view of Damgaard.

The Patent Office rejected claim 23 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Damgaard, as applied to claim 21, and further in view of Shamlou, U.S. Patent No. 6,690,949.

The Patent Office rejected claim 24 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Damgaard, in view of Shamlou, as applied to claim 23, and further in view of Yokev, U.S. Patent No. 5,499,266.

The Patent Office rejected claim 25 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Damgaard.

The Patent Office rejected claim 26 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Damgaard, as applied to claim 25, and further in view of Yokev.

All pending claims recite either a "single down-converter" or a "single means for down-converting" and a first mode in which the received RF signal is multiplied by a plurality of oscillator signals and a second mode in which the received RF signal is multiplied by a single oscillator signal.

Luz, in FIG. 1, shows multiple down-converters 107 that provide signals that are filtered and then summed. Luz does not disclose or suggest a single down-converter having a first mode in which the received RF signal is multiplied by a plurality of oscillator signals and a second mode in which the received RF signal is multiplied by a single oscillator signal.

Damgaard discloses a single down converter 35 that receives mixing frequencies selected by a combiner or switch 65. The combiner or switch 65 chooses an output of one of multiple VCOs 57, 59, 61. Damgaard does not disclose or suggest a single down-converter having a first mode in which the received RF signal is multiplied by a plurality of oscillator signals and a second mode in which the received RF signal is multiplied by a single oscillator signal.

Bell discloses separate down converters 418, 438 for each mode of operation (see FIG. 4). Bell does not disclose or suggest a single down-converter having a first mode in which the received RF signal is multiplied by a plurality of oscillator signals and a second mode in which the received RF signal is multiplied by a single oscillator signal.

None of the other references –Yokev, Shamlou, or applicant's background of the invention - teach or suggest a single down-converter having a first mode in which the received RF signal is multiplied by a plurality of oscillator signals and a second mode in which the received RF signal is multiplied by a single oscillator signal. Yokev does not disclose down-converting a received RF signal. Yokev discloses a down-converter (col. 28, lines 43-61) that reduces that noise of an output frequency and (FIG. 12) a down-conversion of an intermediate frequency in an IF to baseband converter. Shamlou discloses cellular communications transceivers employing a common handset capable of receiving a replaceable module containing circuitry optimized for one or more communication standards (col. 3, lines 51-58). Applicant's Background of the Invention discloses a single mode receiver 300 and a multi-mode receiver 400.

As none of the references disclose or suggest a first mode in which the received RF signal

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is multiplied by a plurality of oscillator signals and a second mode in which the received RF signal is multiplied by a single oscillator signal, claims 1, 5-13, 15, 16, and 20-27 are allowable over the prior art of record.

The Patent Office is respectfully requested to reconsider and remove the rejections of the claims 1, 5-13, 15, 16, and 20-26 under 35 U.S.C. 102(e) or 103(a) based on Luz or Bell, alone or in combination with Shamlou or Yokev, and to allow all of the pending claims 1, 5-13, 15, 16, and 20-40 as now presented for examination. An early notification of the allowability of claims 1, 5-13, 15, 16, and 20-40 is earnestly solicited.

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Respectfully submitted:

Walter J. Malinowski  
Walter J. Malinowski

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Date

Reg. No.: 43,423

Customer No.: 29683

HARRINGTON & SMITH, LLP  
4 Research Drive  
Shelton, CT 06484-6212

Telephone: (203) 925-9400, extension 19  
Facsimile: (203) 944-0245  
email: wmalinowski@hspatent.com

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.

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